

A NEW GENUS AND TWO NEW SPECIES OF CECIDOMYIIDAE
ASSOCIATED WITH PARIANA SPP. (GRAMINEAE)
IN SOUTH AMERICA
(DIPTERA)

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ABSTRACT—A new genus, *Chauliodontomyia* (Diptera: Cecidomyiidae: Clinodiplosini), and 2 new species, *pariana* and *egregia*, collected from spikes of *Pariana* (Gramineae) in South America, are described.

The extraordinary new genus and 2 species described here were discovered by Dr. T. E. Soderstrom and Dr. Cleofé E. Calderón, Department of Botany, Smithsonian Institution, in connection with their study of South American rain forest grasses of the genus *Pariana* (Gramineae). These midges were observed in great numbers on spikes of *Pariana* in Venezuela and Brazil by Soderstrom and Calderón and appear to be part of a complex of insects that may effectively pollinate *Pariana* spp.

The new genus, *Chauliodontomyia* is included in the tribe Clinodiplosini of the subfamily Cecidomyiinae mainly on the basis of the male and female genitalia. The genus differs from all other Clinodiplosini in the unique modification of the labellum: instead of the usual bulbous form, the 2nd labellar segment is strongly sclerotized, elongate, and bent at midlength to form a tusklike structure. Other differences between *Chauliodontomyia* and most other genera in the tribe are the simple claws on all legs and the almost complete lack of sexual dimorphism in the antennal flagellomeres.

Chauliodontomyia, n. gen.

Adult.—Eyes large, broadly contiguous on vertex. Postvertical peak present with 2 long, anteriorly directed setae. Antenna (figs. 9, 10) with 12 flagellomeres, basal ones slightly constricted near midlength, especially in males; 1st and 2nd flagellomeres connate, the 12th with a very long terminal nipple; circumfila not evident. Palpus 4 segmented, the segments short. First labellar segment large, second segment well sclerotized, glabrous, tuskshaped. Labrum bulbous apically, covered with many long, fine hairs. Wing (fig. 7) with R_5 joining C behind apex of wing; R_s present but weak; Cu evanescent beyond fork. Legs long, thin, with approximately same diameter throughout; foreleg about $1\frac{3}{4}$ as long as wing; approximate proportions of parts of foreleg as follows: femur, 1.00; tibia, 0.90; tarsomere I, 0.09; II, 0.56; III, 0.30; IV, 0.23; V, 0.15. Tarsal claws long, untoothed, gently curved (fig. 4); empodium very short in relation to claws. Male abdomen: terga I–VI with very few setae other than the transverse apical row; terga VII–VIII bare except for the 2 anterior sensory setae; sternum II–VIII with many evenly distributed setae; tergum X bilobed, each lobe slightly

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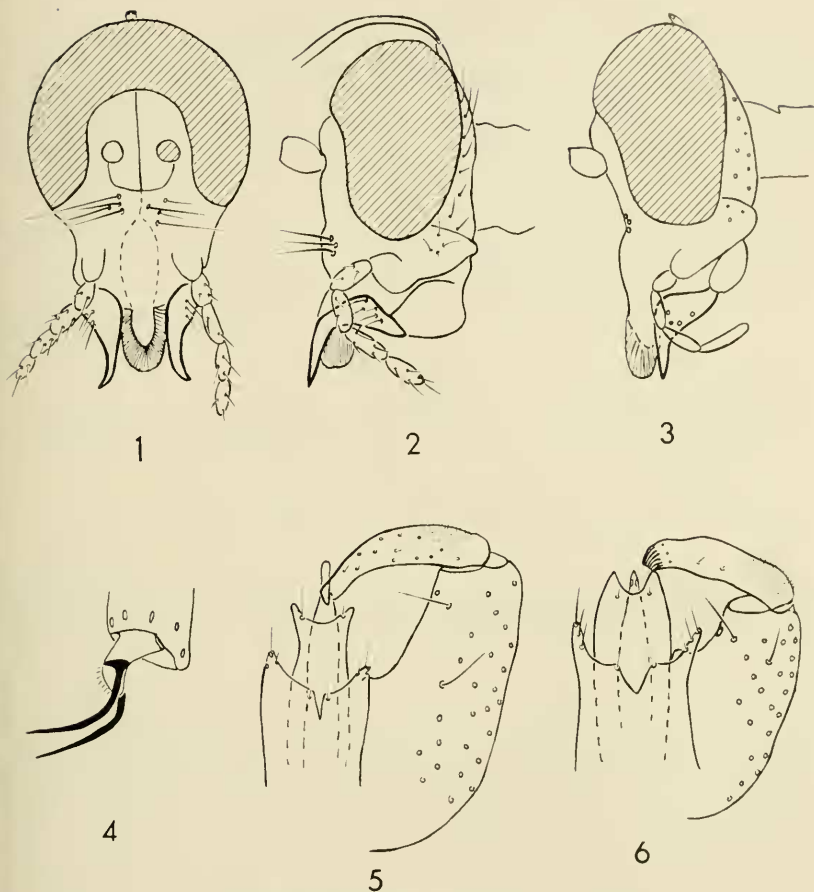


Fig. 1. Head of *Chauliodontomyia pariana*, n. sp (frontal view). Fig. 2. Same (lateral view). Fig. 3. Head of *C. egregia*, n. sp. (lateral view). Fig. 4. Foretarsal claws of *C. pariana*. Fig. 5. Male genitalia of *C. pariana*. Fig. 6. Male genitalia of *C. egregia*.

scalloped; sternum X linear, scalloped apically; aedeagus as long or longer than sternum X; basimere large, expanded medially; distimere long, variously shaped. Female abdomen: terga I-VII and sterna II-VII with many evenly distributed setae; ovipositor not fully retractile, with 2 large lateral lamellae and a small ventral lamella.

Larvae (only tentatively referred here).—Typical for the Clinodiplosini with its bifid sternal spatula, long setae of the dorsal and pleural papillae, and typical terminal papillae, 6 with spiniform setae and 2 with long setae.

Type species.—*Chauliodontomyia pariana*, n. sp.

The generic name means “tusked fly” and refers to the remarkable modification of the labella.

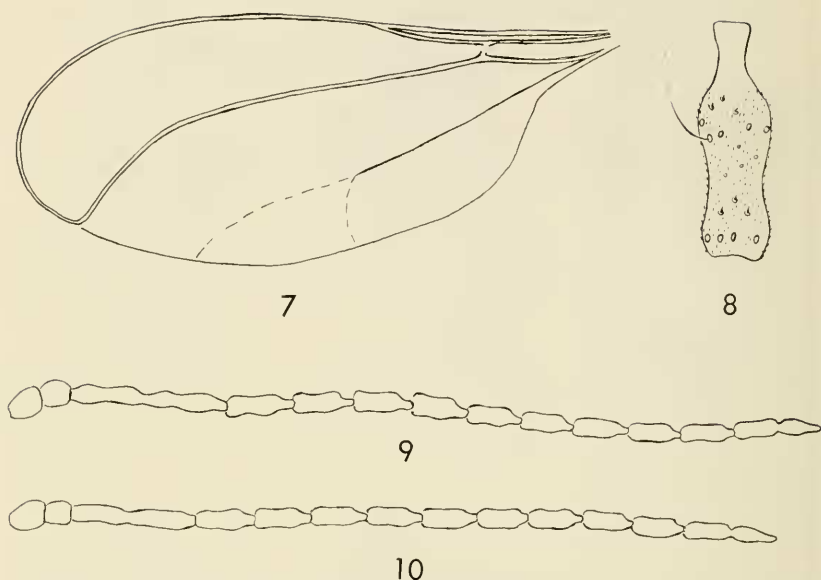


Fig. 7. Wing of *Chauliodontomyia parianae*, n. sp. Fig. 8. Third flagellomere of *C. egregia*, n. sp. Fig. 9. Shape of male antenna of *C. parianae*. Fig. 10. Shape of female antenna of *C. parianae*.

The larvae presumed to belong here were removed from florets of *Pariana imberbis* Nes from Belém, Para, Brazil (collected VII-6 8-1934, J. R. Swallen. They presumably belong to *Chauliodontomyia* because they are typical clinodiplosine larvae and were found in male florets of *Pariana*. Some uncertainty will remain, however, until adults are reared from such larvae.

The 2 new species described below may be separated by the shape of the head (figs. 2-3) and male genitalia (figs. 5-6).

Chauliodontomyia parianae, n. sp.

Adult.—Male flagellomeres I-IV without setulae on constriction near mid-length. First labellar segment large and directly behind second segment with lower part of head consequently quadrate in profile (fig. 2); second labellar segment lateral to labrum. Wing length, 1.70-2.05 mm. Male genitalia (fig. 5): sternum X widest apically; aedeagus narrowest before apex; distimere curved; tapering gradually from base to narrow apical tooth.

Types.—Holotype, ♂, collected on spike of *Pariana stenolemma* Tutin, in rain forest, Rancho Grande, near Maracay, Venezuela, 8-VI-1967, T. R. Soderstrom, USNM 70060. Paratypes: 4 ♂♂, 7 ♀♀, same data as holotype, in USNM; 1 ♂, 1 ♀, same data as holotype, in British Museum (N.H.); 1 ♀, on inflorescence of *Pariana* sp., Belém, Para, Brazil, 27-I-1968, Cleofé E. Calderón, in USNM.

***Chauliodontomyia egregia*, n. sp.**

Adult.—Male flagellomeres covered from base to neck with setulae. First labellar segment dorsad of second segment and not as large as in *C. pariana*, with lower part of head consequently not quadrate in profile (fig. 3); second labellar segment posterior to labrum in profile. Wing length, 1.63–1.90 mm. Male genitalia (fig. 6): sternum X narrowing towards apex; aedeagus narrowest at apex; distimere straight, parallel sided, with broad apical tooth.

Types.—Holotype, ♂, collected on spike of *Pariana stenolemma* Tutin, in rain forest, Rancho Grande, near Maracay, Venezuela, 8-VI-1967, T. R. Soderstrom, USNM 70061. Paratypes: 5 ♂♂, 4 ♀♀, same data as holotype, in USNM; 1 ♂, 1 ♀, same data as holotype, in British Museum (N.H.).

**A NEW SPECIES OF ANTONINA SIGNORET FROM SOUTH DAKOTA
WITH NEW RECORDS FOR *A. BOUTELOUAE* PARROTT¹**

(HOMIOPTERA: COCCOIDEA: PSEUDOCOCCIDAE)

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ABSTRACT—Description and figures are given of the adult female of a new species, *Antonina dakotensis*. This mealybug was collected from Custer County, South Dakota on hairy grama grass. It differs from the other species of *Antonina* in the possession of 6-, and 7-locular pores, also of oral rim ducts, and in the absence of anal ring hairs, 3-locular and multilocular pores.

Although there are 18 species of *Antonina* Signoret known from the world, only five were previously represented in North America. We have prepared the description of an unusual new species found in North America. A revision of the genus by the senior author is in the concluding stage, and a key to all the species of *Antonina* will be given in that publication.

***Antonina dakotensis*, n. sp.**

(Figs. a-l)

Description of the holotype female.—General shape (fig. a) globose. Length 1,772 μ ; width 1,817 μ . No body segmentation or sclerotization detected. Color of live female reddish pink.

Dorsal surface.—Small oral collar tubular ducts (fig. b): few in number, 2.4 μ long; 2.4 μ in diameter.

Oral rim ducts (fig. c): numerous, 5.7 μ long; 7.2 μ in diameter, scattered on the entire dorsum.

Setae: hairlike, 7.8 μ in length.

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